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Dai Kamiya

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EXAMINER

KIM, JUNG W

ART UNIT

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2432

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DELIVERY MODE

12/23/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/684,968	Applicant(s) KAMIYA ET AL.	
	Examiner JUNG KIM	Art Unit 2432	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/30/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office action is in response to the amendment filed on 9/11/08.
2. Claims 7-29 are pending.

Information Disclosure Statement

3. The IDS submitted on 7/30/08 has been considered. Initialed copies are enclosed.

Response to Arguments

4. The Terminal disclaimer filed on 9/11/08 overcomes the provisional double patenting rejection.
5. Applicant's arguments with respect to amended claims 7-14 have been considered but are moot in view of the new ground(s) of rejection. Note that the amendments to claims 7-14 have changed the scope of the claimed invention, which required further search and consideration. For example, the limitation wherein the object generation manager allowing the object generator to generate an imperfect encapsulated object "only when reliability of the one application meets a predetermined requirement" is no longer a required feature of these claims. Also note that although new claim 15 incorporates the aforementioned limitation, none of the claims examined in the non-final rejection mailed on 6/12/08 incorporated the entire breath of new claim 15. Hence, all claims presented in the amendment filed on 9/11/08 define claimed

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inventions having different scope than the ones examined in the non-final rejection mailed on 6/12/08.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 7, 8 and 10-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Colburn et al. US 6,173,404. (hereinafter Colburn)

8. As per claims 7, 8 and 10-15, Colburn discloses a data processing device comprising:

a memory that stores one or more data sets and programs including one or more application programs; and a processor that executes the programs to function as:

a. an object generator that generates an object containing one or more procedures of operation using at least one of the one or more data sets, the one or more procedures being called and executed by the processor in accordance with an application program stored in the memory (fig. 7A, reference nos. 182-192, data is accessible by instantiating an instance of an object and calling a method of the object),

- b. a data access manager that prohibits any access to the one or more data sets by the processor running the application program stored in the memory without calling and executing a procedure contained in an object generated by the object generator (5:14-17, objects have properties which are accessible by methods), and
- c. an object generation manager that determines whether to generate a perfect encapsulated object or an imperfect encapsulated object based on reliability of one application program among the one or more application programs, the perfect encapsulated object being an object containing no procedures of operation making a specific data set among the one or more data sets accessible by the processor running any one of the one or more application programs, the object generation_manager allows the object generator to generate, in accordance with the one application program among the one or more application programs, the imperfect encapsulated object that is an object containing procedures of operation making the specific data set among the one or more data sets accessible by the processor running any one of the one or more application programs, if it is determined to generate an imperfect encapsulated object (col. 11:15-38; 12:17-33; 14:35-16:21, dynamic inheritance allows methods and properties to be added to or removed at runtime; fig. 7A, reference nos. 204-212; fig. 7B, reference nos. 218-228; figs. 10 and 11);
- d. wherein the memory stores reliability information indicating degree of reliability of each of the one or more application programs, and wherein the

object generation manager determines whether to generate a perfect encapsulated object or an imperfect encapsulated object based on the reliability information stored in the memory (Col. 9, Tables 1 and 2; figs. 7A and 7B);

e. wherein the object generator generates a perfect encapsulated object when the object generator is not allowed by the object generation manager to generate the imperfect encapsulated object (fig. 7B, reference nos. 228 and 224; fig. 11; methods are dynamically added when instance has proper permissions);

f. wherein the object generation manager determines to generate the imperfect encapsulated object only when importance of the specific data set meets a predetermined requirement (Tables 1 ("Target"; "Access Constraints", "Access Authorization"), 2 and 4; col. 3:25-33; 12:30-34);

g. wherein the data access manager does not prohibit access to the one or more data sets by the processor without calling and executing a method contained in an object generated by the object generator when the processor runs an application program that is preinstalled in the memory (1:50-54, security mechanism only restricts access to user created objects);

h. wherein the data access manager allows the processor to access only data sets that are stored in a memory area allotted to the one application program or in a memory area allotted to all of the one or more application programs, when the processor runs the one application (col. 9:25-26);

i. wherein at least one of the one or more application programs is described as a set of intermediate codes required to be converted into executable codes

before execution, and wherein the processor that executes the programs stored in the memory to further function as a converter that converts an application program described as a set of intermediate codes into executable codes (col. 5:44-54; objects implemented by programming tools);

j. wherein the object generation manager that determines to generate an imperfect encapsulated object only when reliability of the one application meets a predetermined requirement (fig. 7A, reference no. 204; fig. 7B, reference nos. 216, 218; 220; fig. 10, reference no. 258; fig. 11 and related text).

9. As per claims 16-22, Colburn discloses a data processing device comprising: a memory that stores at least one data set and at least one application program; and a processor in communication with the memory, the processor configured to:

k. generate an object containing at least one procedure of operation using the at least one data set, the procedure being executed by a processor in accordance with the at least one application program stored in the memory (fig. 7A, reference nos. 182-192, data is accessible by instantiating an instance of an object and calling a method of the object);

l. analyze at least one of the application program or the data set; determine whether to generate an imperfect encapsulated object or a perfect encapsulated object based on the analysis of the application program or the data set, the imperfect encapsulated object being an object containing one or more procedures of operation making the at least one data set accessible by the

processor running the application program, the perfect encapsulated object being an object containing no procedures of operation making the at least one data set accessible by the processor running the application program (col. 12:17-33; 14:35-16:21, dynamic inheritance allows methods and properties to be added to or removed at runtime; fig. 7A, reference nos. 204-212; fig. 7B, reference nos. 218-228; figs. 10 and 11);

m. generate the imperfect encapsulated object if it is determined whether to generate an imperfect encapsulated object; and generate the perfect encapsulated object if it is determined whether to generate an perfect encapsulated object (fig. 7B, reference nos. 228 and 224; fig. 11; methods are dynamically added when instance has proper permissions);

n. wherein analyzing at least one aspect of the application program or the data set comprises analyzing reliability of the application program (col. 8:60-68, Tables 1 and 2);

o. wherein the at least one aspect comprises a trusted application identifier associated with the application program (fig. 9, reference nos. 188, 188B; fig. 10);

p. wherein analyzing at least one aspect of the application program or the data set comprises analyzing at least one aspect of the data set (10:54-11:4; fig. 8);

- q. wherein analyzing at least one aspect of the data set comprises analyzing an importance identifier associated with at least a part of the data set (10:54-59; fig. 8);
- r. wherein analyzing at least one aspect of the data set comprises analyzing a storage location of the data set within the memory (13:15-42);
- s. wherein the process is further configured to execute the application program, and wherein analyzing at least one of the application program or the data set and determining whether to generate an imperfect encapsulated object or a perfect encapsulated object when executing the application program (col. 11:15-38; 12:17-33; 14:35-16:21, dynamic inheritance allows methods and properties to be added to or removed at runtime; fig. 7A, reference nos. 204-212; fig. 7B, reference nos. 218-228; figs. 10 and 11).

10. As per claims 23-29, they are claims corresponding to claims 16-22, and they do not teach or define above the information claimed in claims 16-22. Therefore, claims 23-29 are rejected as being anticipated by Colburn for the same reasons set forth in the rejections of claims 16-22.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Colburn.

13. As per claim 9, the rejection of claim 7 under 35 USC 102(b) as being anticipated by Colburn is incorporated herein. Although Colburn does not expressly disclose a communication interface that receives from a server the reliability information, it is notoriously well known in the art at the time the invention was made for management information used by a processor to be maintained and stored remotely. This feature consolidates important data files to be centrally located for more efficient administration. Official notice of this teaching is taken. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made for the invention of Colburn to include a communication interface that receives from a server the reliability information. One would be motivated to do so for a more efficient means of managing information as known to one of ordinary skill in the art. The aforementioned cover the limitations of claim 9.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Communications Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jung W. Kim whose telephone number is 571-272-3804. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Jung Kim/
Primary Examiner, AU 2432